



LANL – UCR Collaborative Research Program 2004 Call for Proposals

Proposal Deadline: January 17, 2005

Purpose

This package designed by the LANL/UCR CARE Steering Committee provides key dates and submission details for the new LANL Cooperative Agreement proposals. Please read the guidelines carefully.

Program Goals and Benefits

Los Alamos National Laboratory (Laboratory) and the University of California - Riverside (UCR) share the strategic goal of strengthening University-Laboratory interactions to provide opportunities for bilateral research, education, recruiting and retention. UCR wishes to provide education and research opportunities for promising students and mechanisms for faculty to participate in new and innovative research ideas. The Laboratory wishes to enhance its education and research collaborations with universities in areas of strategic importance to the Laboratory, and to provide research environments to students pursuing technical careers, possibly at the Laboratory. This is a bilateral agreement allows both institutions to take full benefit of overlapping commitments to research and education and build on present areas of excellence. Proposals hereby submitted should strengthen these commitments and identify a research area listed below.

Areas of Research

The Laboratory and UCR have identified four research areas of strategic importance that will be supported under this agreement: computer science, environmental sciences, biosciences, and materials science.

Areas of research activity are:

- * **Computer Science.** Computational Science, High Performance Networking, Parallel and Distributed Computing.
- * **Environmental Sciences.** Earth Sciences, Waste and Transport Technology, Risk Assessment, and Hydrology.

* **Bioscience.** Functional Genomics, Nano-Bio Science, Computational Biosystems and Informatics.

* **Materials Science.** Engineering Materials, Nanoscience, Geomaterials, and Condensed Matter.

Programs

Four types of collaborative research programs are eligible for support: 1) Faculty-staff “pilot” research programs. 2) Student and postdoctoral scholar programs, 3) University faculty and Laboratory staff exchange, and 4) Courses, seminars, workshops, and colloquia. These are described in further detail below.

1. **Faculty – Staff “Pilot” Research Programs.** This program is designed to provide seed funding for new projects and ideas that clearly merge and synergize research between the two institutions. The funding shall be used to promote new innovative research ideas that are cutting edge – and cross-disciplinary. Proposals should anticipate development of sustainable bilateral research and external funding.
2. **Student and Postdoctoral Programs**
 - a. **Students.** This program emphasizes education and is designed to recruit new talented students to research opportunities. Research projects proposed for students should ensure that students are placed in rewarding education/work assignments that complement both the university program and Laboratory needs and strategic goals. In general, students will complete their coursework at UCR and perform research at Los Alamos. Subject to availability of funds and approval by the Steering Committee, funding opportunities will be provided for both undergraduate and graduate students. Faculty participation and advising are expected by both the UCR and Laboratory mentors. An essential part of this program is mentor visitation at the host institution. This is important for the communication between the two institutions, brings educational benefits to the students and offers future collaborations. Los Alamos mentors will also be expected to have frequent presence on the UCR campus, as an essential part of fostering scientific collaborations and attracting students to Los Alamos.
 - b. **Postdocs.** This program is designed to jump-start careers through Laboratory-UCR initiatives. Opportunities for postdoctoral researchers to participate through this cooperative agreement includes 1) short-term visits to Los Alamos to learn valuable skills and to conduct research or 2) extended stays to participate in collaborative research projects jointly supervised by UCR and Los Alamos. The program for example might include a postdoc three months travel to a LANL user facility such as LANSCE, or a three month teaching sabbatical. In some cases, the program might fund a year-long project with possibility for extension.

3. University Faculty and Laboratory Staff Exchange Programs. The faculty and staff program is intended to enhance interactions between UCR faculty and Los Alamos staff and increase their opportunities for collaborative research projects. Long-term (three to six months) and short term “sabbatical” (one to three months) exchanges of faculty and staff may include seminar or course presentations, research projects and experiments, or educational visits. This program provides opportunities for interactions among faculty, staff, and students to discuss research projects and encourages future bilateral grant submissions. An important component of the program is Laboratory at UCR adjunct professorships where applicable. These appointments will be subject to the same requirements and standards as those for UCR faculty appointments and other applicable UCR policies, practices, and procedures.

4. Courses, Seminars, Workshops, and Colloquia. This program supports special-topic courses, workshops, and targeted seminar series. The program is designed to enhance interactions between the UCR faculty and Los Alamos staff to develop a better understanding of issues relevant to both institutions. An important component of this program is strong participation of the visiting institution at the host facility.

Application Procedures

Proposals must be reviewed and endorsed by the UCR Sponsored Projects Office prior to submission. The cover sheet must then be scanned with appropriate Sponsored Projects and CPI signatures prior to submitting the entire proposal.

The proposal package should include:

Cover Page. The cover page will be available on line after 7/12.

Proposal. The proposal must be submitted as a Microsoft Word (DOC) or Adobe Acrobat (PDF) document

- **Abstract.** The abstract should be 300 words or less, shall be written in 12 pt in Times New Roman font with one-inch margins around all the text.
- **Body.** The research plan for the proposal shall be no longer than five (5) pages. The document shall be written in 12 pt in Times New Roman font with one-inch margins around all the text and should include – background information, research plan to Laboratory/UCR research initiatives and relevant educational aspects.
- **Budget.** Download and complete Excel spreadsheet budget template.
- **Curriculum Vitae.** Include current and pending support.
- **Recommendations of Reviewers.** Please list three to five potential external reviews including email addresses and phone numbers.

Submission of Proposals

Proposals must be submitted prior to COB on January 17, 2005. *No late submissions will be accepted.* **All proposals must be submitted via email to Debbie Wilke, dwilke@lanl.gov.** Proposals must be reviewed and endorsed by the UCR Sponsored Projects Office prior to submission. On soon as proposals are received, Debbie will send an email to the principal investigators that the submission is either complete, or list what is lacking.

For proposal submission questions contact:

- * Debbie Wilke via email (dwilke@lanl.gov) or telephone (505-667-7824).
- * Sellyna Ehlers via email (sellyna.ehlers@ucr.edu) or 909#160;787-5535.

Funding Information

Funding requests will be accepted for an initial period up to 18 months with a support level not to exceed \$100K. Budget request amounts must be justified and supported by the proposal project. Proposal renewal requests may be considered in future call is for a maximum total duration of 3 years. Renewal requests will require a new application and will require evidence of collaborative progress and/or results (e.g. manuscript co-authorship, joint extramural grant applications, etc.).

Final reports are required for all funded proposals no later than one month after the end of the funding period. Total amount of funding for all aspects of the program is approximately \$600K per year.

Proposal Review Process

The method of reviewing and selecting proposals is the responsibility of the LANL/UCR Steering Committee. This process will ensure that the proposals meet all of UC requirements including the approval by the UCR Office of Research Affairs.

The joint Steering Committee will coordinate the peer review of the proposals and will provide a written evaluation based on the evaluation criteria listed below and will rank the proposals accordingly.

* **Scientific Impact.** Explain why this work will advance the field of research in terms of creativity, innovation, technique and feasibility. Will the research project impact significantly a scientific field, a technical application, or an area of strategic programmatic importance to LANL? Specifically what aspects of the project require the unique capabilities of the LANL and UCR PIs?

* **Collaboration: Research and Education.** This is an important aspect of the CARE program. How does this program advance the education and career paths of students, faculty or technical staff involved? Describe in detail the degree and quality of the bilateral (Laboratory-UCR) cooperation.

* **Growth Potential.** Describe how the work might expand to larger research granting opportunities. Explain how the research will impact present or future Laboratory and Campus programs.

* **Qualification of Investigators.** Describe the qualifications of all researchers and collaborators in the proposal, including research experience and mentor/ teaching experience.

Proposal Evaluation Committee. The Laboratory and UCR administration have designated initial members of the CARE Steering Committee consisting of four representatives from UCR (including the VC for Research) and four representatives from LANL (including the UC Coordinator of Science & Technology). The Steering Committee will review the proposals in coordination with external reviewers as appropriate.

Membership on the committee will be for nominally 2 years with a staggered rotation such that new members rotate onto the committee each year. The UCR VC-Research and the LANL UC Coordinator will be permanent members of the committee and will be responsible for identifying new potential committee members.

Notes

a. **Budget Sheet.** The portions of these expenditures to be made by the Campus and the Laboratory should be listed separately. Show all direct costs, including salary, benefits, materials and services, equipment and travel. If the proposal is for a period to exceed 18 months, then a separate budget sheet should be provided for the extension period (note that any extension would require a separate application under a future call for proposals).

Funds for Los Alamos expenses will be transferred to the appropriate Los Alamos group. No general and administrative taxes burden are imposed by the Laboratory. Ten percent of the total annual CARE budget will be assigned to the UCR VC-Research for fast-track support of more spontaneous collaborative opportunities (e.g. short projects, travel, workshops, etc.). Requests for small ~\$5-10K can be made directly to the UCR VC-Research.

b. **Attachments.** The following must be attached to each proposal:

A. **Curriculum Vitae.** Attach 1-page vitae for the LI, lead CI, and co PI, students (graduate and undergraduate), postdocs, and any other major participants. Include only the most relevant publications to the proposed work.

B. **Required Documentation.** All required documentation is to comply with University, Campus, Laboratory, and federal requirements.

C. **Budget Form.**